

Claims:

1. (Currently Amended) A method of evaluating a threat posed by a substance, the method comprising the steps of:

- (a) deploying a plurality of remote sensing units and a control unit adapted to automatically identify the substance and to provide a corresponding report, wherein the report comprises an image of the substance;
- (b) uploading the report to a secure remote server via a system chosen from the group consisting of a cell phone network and a satellite phone network;
- (c) establishing a hierarchy of threat response and evaluation authorities, wherein the evaluation authorities include a plurality of experts having knowledge relevant to making a high-level threat assessment; and
- (d) allowing the hierarchy of threat response and evaluation authorities to access the report on the remote server via a wide area network.

2. (Previously presented) The method as set forth in claim 1, further including the step of providing the remote server with evaluation tools for automatically evaluating the report in light of other relevant data.

3. (Currently Amended) A method of evaluating a threat posed by a substance, the method comprising the steps of:

- (a) deploying a plurality of remote sensing units and a control unit adapted to automatically detect and identify the substance and provide a corresponding report, wherein ~~the substance is chosen from the group consisting of a solid, a liquid, and a gas~~ the report includes a magnified image of the substance;
- (b) uploading the report to a remote server via a system chosen from the group consisting of a cell phone network and a satellite phone network;
- (c) determining an actual geographic location of a remote sensing unit detecting the substance using a GPS device located on the remote sensing unit, communicating the actual geographic location to the control unit, and identifying an appropriate local reporting authority and an appropriate local reporting policy based upon the actual geographic location of the remote sensing unit detecting the substance;
- (d) notifying the appropriate local reporting authority of the report in accordance with the appropriate local reporting policy;
- (e) establishing a hierarchy of threat evaluators, including the appropriate local reporting authority and a plurality of experts having knowledge relevant to making a high-level threat assessment; and
- (f) allowing the hierarchy of threat evaluators to access the report on the remote server via a wide area network.

4. (Previously presented) The method as set forth in claim 3, further including the step of providing the remote server with evaluation tools for automatically evaluating the report in light of other relevant data

5. (Cancelled)

6. (Previously presented) The method as set forth in claim 1, wherein the response authorities are chosen from the group consisting of local first responders, state agencies, state departments, regional agencies, regional departments, national departments, and national agencies.

7. (Previously presented) The method as set forth in claim 1, wherein the evaluation authorities include experts on subjects chosen from the group consisting of medical issues relating to exposure to chemical substances, medical issues relating to exposure to biological substances, medical issues relating to exposure to radioactive substances, law, law enforcement, policy, doctrinal issues, historical cases, modeling, and simulation.

8. (New) The method as set forth in claim 1, wherein the image of the substance is a microscope-magnified image.

9. (New) The method as set forth in claim 1, further comprising collecting the substance with a sample examination cassette including:

- a roll of filter paper for receiving the substance;
- a roll of film providing an impermeable barrier for isolating the substance; and
- an archive spool for collecting the roll of filter paper and the roll of film.

10. (New) The method as set forth in claim 1, wherein the remote sensing units are deployed at a distance by an airdrop, balloon, or robot.